within fairly narrow limits in normal cases, then for all practical purposes Indigo Carmine would appear to be as useful as Phthalein, a dye the whole amount of which is excreted by the kidneys. It possesses, when given intravenously, the same quick appearance, 3 to 5 minutes, and has the further advantage of short time of collection.

We desire to report then our definite findings to this time on that as a bladder test the average time of appearance is three to five minutes. The shortest time being one and a half minutes, and the longest time being five minutes.

We had expected and are disappointed in not being able to report a considerable number of findings of definite percentages. The reasons that we are not able to do so are, as indicated earlier, that we did not for some time appreciate the instability of the dye, and its loss of color through standing, through which we collected data that was confusing and conflicting. Neither did we in our earlier work realize as we now do the early time in which the bulk of elimination took place.

Elimination is absolutely completed in ninety minutes' average, the latter seventy minutes of urine collection not carrying enough dye to be useful. The shortest time in which only a trace is discoverable is fifty minutes, and the longest time in which we have been able to recover an appreciable amount being ninety minutes.

Conclusions.

1. Indigo Carmine may be of service when Phthalein can not be used on account of hematuria.

2. Indigo Carmine output can be measured and checked against a normal standard.

3. Indigo Carmine output, when estimated by suitable colorimetric methods, conforms to as many of the requirements of an ideal functional test as does Phthalein.

4. Indigo Carmine requires but little time for the completion of an accurate functional test of excretion.

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Book Reviews

Cerebrospinal Fluid. By Abraham Levinson. 231 pages. Illustrated. St. Louis: Mosby. 1919. Price, $3.00.

Embraced in this small book is the physiology of spinal fluid, methods of obtaining fluid, normal and abnormal properties with tests for same, clinical application of findings and intraspinal therapy.

It is obvious that the author in aiming to write a book comprehensive in scope has included useless matter to the sacrifice of valuable detail and exposition in the consideration of important topics. Being a clinician his biochemical and especially bacteriological methods are weak. Much more space should have been devoted to the bedside application of spinal fluid findings.

The chapter on intraspinal treatment finds the author, aided by a broad experience, at his best.

E. A. V.

Atlas of Operative Gynecology. By Barton C. Hirst. 292 pages, illustrated. Philadelphia and London: Lippincott, 1919.

The book is more than the title implies. It is a treatise on gynecological operations. The descriptions on the different operations are clear and the illustrations show the steps of each operation in its most essential stages.

The author gives in each instance the technic of the one method of operative procedure which he, in his long career as operator and teacher, has found best adapted to get the desired results. The book is splendidly gotten up; magnificent print; fine illustrations, though somewhat schematic.

To the gynecological operations proper are added caesarean section and pubiotomy, distinctly obstetrical operations. The propriety of this addition may be questioned especially when some gynecological operations and operations often performed while doing gynecological work are omitted. Such operations as resection of the ovaries, sterilization, plastic work on the tubes, implantation of ureters in the bladder, union of severed ureters, nephrectomy, and appendectomy are omitted but should be included.

H. J. K.

Mess Officers' Manual. Prepared by several officers of the division of food and nutrition. Philadelphia and New York: Lea & Febiger. 1919.

Of the countless ways in which the work of the army in dealing with large numbers of men has been exemplary, there are none more striking than those of food and rationing. This little manual, in the compass of 192 pages, gives what is necessary for a mess officer to know. Not only that, but it might be studied to great advantage by hospital superintendents, contractors engaged in feeding large numbers of laborers, and other civilians who have to do with problems of rationing large numbers of people. If the feeding of patients in civilian hospitals were worked out on the plan of the army mess, the patients would get better food and better service with much less waste.

L. E.

Hygiene and Public Health. By George M. Price. 2nd ed., rev., 280 pp. Philadelphia and New York: Lea & Febiger. 1919. Price, $1.50.

This volume, in the form of a syllabus, contains a great deal of information compressed in small space, but the magnitude of the field covered is such that most of the subjects are treated so very briefly as to be little more than suggestions for further reading elsewhere. The chapters on foods, meat inspection, milk, disposal of waste, etc., are very good, but it is unfortunate that the general excellence of the book should be marred by certain statements indicating the lack of first hand knowledge of bacteriology and parasitology. As an example, the statement is made that water may contain the ova of taenia solium, lata, etc., oxyuris vermicularis, ascaris lumbricoides, filaria dracunculus, filaria sanguinis hominus, anchylostomum duodenale, bilharzia hematobia, distomum haematobimum, leeches, etc., and among the pathogenic bacteria occasionally found in water are the bacilli of diphtheria, tuberculosis, tetanus, anthrax, malignant edema, etc. The organism of "Weil's" disease is also mentioned as being found in water.

Among the diseases of animals which are infectious to men are included typhoid, cholera and Texas fever.

The chapter on school hygiene is devoted mainly to building sanitation and contains the peculiar statement that the books should be disinfected at regular intervals, and it barely mentions the school nurse. The statement that the school should be furnished with one full-time physician for every 500 pupils will not meet with general endorsement as a practical method of conducting school medical inspection.

W. H. K.